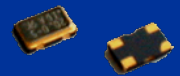


# BFC53 CRYSTAL SERIES

## 5 x 3.2 x 1mm CERAMIC SMD PACKAGE



**Features:**

- 8.0 MHz – 250.0 MHz Frequency Range
- AT-cut Crystal
- SMD Ceramic Package
- **RoHS Compliant**
- Extended Temperature Range Available
- Industry Standard Footprint
- Ultra Miniature (5.0 x 3.2mm with 1.0mm Height Max.)
- High Precision and Excellent Aging and Solder ability

**ELECTRICAL SPECIFICATIONS**

Frequency Range	8.0 MHz to 250.0 MHz
Resonance Mode	Fundamental (8.0-155 MHz), 3 <sup>rd</sup> OT (70 – 150 MHz), 5 <sup>th</sup> OT (150 – 250 MHz)
Calibration Tolerance @ 25°C	± 50ppm, ± 30ppm, ± 20ppm, ± 15ppm, ± 10ppm
Frequency Stability Ref @ 25°C	± 50ppm, ± 30ppm, ± 10ppm, ± 5ppm
Temperature Range	0-70°C, -10+60°C, -40+85°C,
Crystal Aging	± 3ppm / Year Maximum
Storage Temperature	-40+85°C
Shunt Capacitance	≤ 7.0pF
Load Capacitance	12pF (Standard), 16pF, 18pF, Others, or Series Resonant
Drive Level	0.1mW Maximum

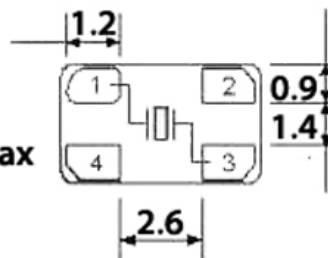
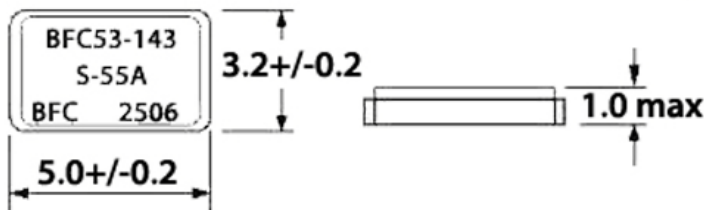
**Equivalent Series Resistance ( Maximum)**

Frequency Range	ESR (Ohms)	Mode	Frequency Range	ESR (Ohms)	Mode
8.0 to 9.999 MHz	120.0	Fundamental	16.0 to 155.0 MHz	40.0	Fundamental
10.0 to 11.999 MHz	80.0	Fundamental	70.0 to 150.0 MHz	80.0	3 <sup>rd</sup> OT
12.0 to 15.999 MHz	60.0	Fundamental	150.0 to 250.0 MHz	80.0	5 <sup>th</sup> OT

**Part Numbering System**

Model	Frequency	Load (Cl)	Tolerance @ 25°C	Stability Over Temp. Range	Operate Temp.
BFC53	143 = 14.31818	S = Series	5 = ± 50ppm	5 = ± 50ppm	A = 0 to 70°C
<a href="#">Click Here for Standard Crystal Frequencies Abbreviations PgC17</a>		10pF-32pF	3 = ± 30ppm	3 = ± 30ppm	B = -10 to 60°C
			2 = ± 20ppm	1 = ± 10ppm	D = -40+85°C
			6 = ± 15ppm	4 = ± 5ppm	
			1 = ± 10ppm		

**All Mechanical Dimensions In mm**



**Recommended Solder Pad Layout**

